

**IN THE CLAIMS:**

**Please cancel** claims 5, 10, and 11. **Please also amend** claims 1, 6, 7, and 12, and **add** new claims 13, 14, 15, 16, and 17 as shown in the complete list of claims that is presented below.

Claim 1 (currently amended): A semiconductor light emitting device comprising:

a semiconductor light emitting portion;

a front surface electrode provided on one side of the semiconductor light emitting portion;

an electrically conductive substrate which is provided on the other side of the semiconductor light emitting portion, which is transparent to light emitted from the semiconductor light emitting portion, and which has front and back surfaces;

a rear surface electrode in ohmic contact with a first region of the back surface of the electrically conductive substrate opposite from the semiconductor light emitting portion and having a honeycomb pattern which is continuously distributed ~~which is a continuous line distributed~~ on the entire back surface of the substrate; and

a rear surface insulation layer which covers a second region of the back surface of the electrically conductive substrate other than the first region, and which is transparent to the light emitted from the semiconductor light emitting portion.

Claim 2 (previously presented): The semiconductor light emitting device as set forth in claim 1, further comprising a reflection layer which is composed of an electrically conductive material, which is deposited in contact with the rear surface electrode, which covers the rear surface electrode and the rear surface insulation layer, and which has a greater reflectivity with respect to the light emitted from the semiconductor light emitting portion than the rear surface electrode.

Claim 3 (previously presented): The semiconductor light emitting device as set forth in claim 1, wherein the electrically conductive substrate is a silicon carbide substrate comprised of silicon carbide having a dopant content controlled so that the substrate has a resistivity of  $0.05\Omega\text{cm}$  to  $0.5\Omega\text{cm}$ .

Claim 4 (previously presented): The semiconductor light emitting device as set forth in claim 1, wherein the front surface electrode comprises a transparent electrode film provided in contact with the semiconductor light emitting portion and composed of an electrically conductive material which is transparent to the light emitted from the semiconductor light emitting portion.

Claim 5 (cancelled)

~~Claim 6 (currently amended): The semiconductor light emitting device as set forth in claim 1, wherein the continuous line of the pattern of the rear surface electrode includes (a) a plurality of line segments defining a hexagonal pattern surrounding a center region of the back surface and (b) a radial line pattern including line~~

~~segments respectively extending radially from the vertices of the hexagonal pattern.~~

A semiconductor light emitting device comprising:

a semiconductor light emitting portion;

a front surface electrode provided on one side of the semiconductor light emitting portion;

an electrically conductive substrate which is provided on the other side of the semiconductor light emitting portion, which is transparent to light emitted from the semiconductor light emitting portion, and which has front and back surfaces;

a rear surface electrode in ohmic contact with a first region of the back surface of the electrically conductive substrate opposite from the semiconductor light emitting portion and having a honeycomb pattern defined by a plurality of line segments in a hexagonal pattern with line segments respectively extending radially from the vertices of the hexagonal pattern, which is continuously distributed on the entire back surface of the substrate; and

a rear surface insulation layer which covers a second region of the back surface of the electrically conductive substrate other than the first region, and which is transparent to the light emitted from the semiconductor light emitting portion.

Claim 7 (currently amended): A semiconductor light emitting assembly, comprising:

a mounting board;

a semiconductor light emitting device mounted on the mounting board;  
and

an electrically conductive blazing material provided between the mounting board and the semiconductor light emitting device for bonding the semiconductor light emitting device to the mounting board,

wherein the semiconductor light emitting device is comprised of:

a semiconductor light emitting portion;

a front surface electrode provided on one side of the semiconductor light emitting portion;

an electrically conductive substrate which is provided on the other side of the semiconductor light emitting portion, which is transparent to light emitted from the semiconductor light emitting portion, and which has a front surface and a back surface which faces the mounting board;

a rear surface electrode in ohmic contact with a first region of the back surface of the electrically conductive substrate opposite from the semiconductor light emitting portion and having a honeycomb pattern which is continuously distributed on the entire back surface of the substrate;

a rear surface insulation layer which covers a second region of the back surface of the electrically conductive substrate other than the first region, and which is transparent to the light emitted from the semiconductor light emitting portion; and

a reflection layer which is deposited in contact with the rear surface electrode, which covers the rear surface electrode and the rear surface insulation layer, which has a greater reflectivity with respect to the light emitted from the

semiconductor light emitting portion than the rear surface electrode, which has an interface with the blazing material disposed between the reflection layer and the mounting board, and which is composed of a material which is electrically conductive and which has a reflectivity observed at an interface between the rear surface insulation layer and the material that is higher than a reflectivity observed at an interface between the surface of the electrically conductive substrate and the blazing material with respect to the light emitted from the semiconductor light emitting portion.

Claim 8 (previously presented): The light emitting assembly as set forth in claim 7, wherein the electrically conductive substrate is a silicon carbide substrate comprised of silicon carbide having a dopant content controlled so that the substrate has a resistivity of  $0.05\Omega\text{cm}$  to  $0.5\Omega\text{cm}$ .

Claim 9 (previously presented): The light emitting assembly as set forth in claim 7, wherein the front surface electrode comprises a transparent electrode film provided in contact with the semiconductor light emitting portion and composed of an electrically conductive material which is transparent to the light emitted from the semiconductor light emitting portion.

Claim 10 (cancelled)

Claim 11 (cancelled)

Claim 12 (currently amended): ~~The light emitting assembly as set forth in claim 10, wherein the continuous line of the pattern of the rear surface electrode includes (a) a plurality of line segments defining a hexagonal pattern surrounding a center region of the back surface and (b) a radial line pattern including line segments respectively extending radially from the vertices of the hexagonal pattern.~~

A semiconductor light emitting assembly, comprising:

a mounting board;

a semiconductor light emitting device mounted on the mounting board;

and

an electrically conductive blazing material provided between the mounting board and the semiconductor light emitting device for bonding the semiconductor light emitting device to the mounting board,

wherein the semiconductor light emitting device is comprised of:

a semiconductor light emitting portion;

a front surface electrode provided on one side of the semiconductor light emitting portion;

an electrically conductive substrate which is provided on the other side of the semiconductor light emitting portion, which is transparent to light emitted from the semiconductor light emitting portion, and which has a front surface and a back surface which faces the mounting board;

a rear surface electrode in ohmic contact with a first region of the back surface of the electrically conductive substrate opposite from the semiconductor light emitting portion and having a pattern defined by a plurality of line segments in

a hexagonal pattern with line segments respectively extending radially from the vertices of the hexagonal pattern, which is continuously distributed on the entire back surface of the substrate;

a rear surface insulation layer which covers a second region of the back surface of the electrically conductive substrate other than the first region, and which is transparent to the light emitted from the semiconductor light emitting portion; and

a reflection layer which is deposited in contact with the rear surface electrode, which covers the rear surface electrode and the rear surface insulation layer, which has a greater reflectivity with respect to the light emitted from the semiconductor light emitting portion than the rear surface electrode, which has an interface with the blazing material disposed between the reflection layer and the mounting board, and which is composed of a material which is electrically conductive and which has a reflectivity observed at an interface between the rear surface insulation layer and the material that is higher than a reflectivity observed at an interface between the surface of the electrically conductive substrate and the blazing material with respect to the light emitted from the semiconductor light emitting portion.

Claim 13 (new): The semiconductor light emitting device as set forth in claim 6, further comprising a reflection layer which is composed of an electrically conductive material, which is deposited in contact with the rear surface electrode, which covers the rear surface electrode and the rear surface insulation layer, and which has a greater reflectivity with respect to the light emitted from the

semiconductor light emitting portion than the rear surface electrode.

Claim 14 (new): The semiconductor light emitting device as set forth in claim 6, wherein the electrically conductive substrate is a silicon carbide substrate comprised of silicon carbide having a dopant content controlled so that the substrate has a resistivity of  $0.05\Omega\text{cm}$  to  $0.5\Omega\text{cm}$ .

Claim 15 (new): The semiconductor light emitting device as set forth in claim 6, wherein the front surface electrode comprises a transparent electrode film provided in contact with the semiconductor light emitting portion and composed of an electrically conductive material which is transparent to the light emitted from the semiconductor light emitting portion.

Claim 16 (new): The light emitting assembly as set forth in claim 12, wherein the electrically conductive substrate is a silicon carbide substrate comprised of silicon carbide having a dopant content controlled so that the substrate has a resistivity of  $0.05\Omega\text{cm}$  to  $0.5\Omega\text{cm}$ .

Claim 17 (new): The light emitting assembly as set forth in claim 12, wherein the front surface electrode comprises a transparent electrode film provided in contact with the semiconductor light emitting portion and composed of an electrically conductive material which is transparent to the light emitted from the semiconductor light emitting portion.